

# Cristóbal García-a

## List of Publications by Year in descending order

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59  
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59  
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times ranked

74  
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#	ARTICLE	IF	CITATIONS
1	The integrability problem for a class of planar systems. <i>Nonlinearity</i> , 2009, 22, 395-420.	1.4	71
2	Quasi-homogeneous normal forms. <i>Journal of Computational and Applied Mathematics</i> , 2003, 150, 193-216.	2.0	40
3	Centers of quasi-homogeneous polynomial planar systems. <i>Nonlinear Analysis: Real World Applications</i> , 2012, 13, 419-431.	1.7	35
4	Integrability of two dimensional quasi-homogeneous polynomial differential systems. <i>Rocky Mountain Journal of Mathematics</i> , 2011, 41, .	0.4	30
5	The center problem for a family of systems of differential equations having a nilpotent singular point. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 340, 32-43.	1.0	29
6	Monodromy, center and focus and integrability problems for quasi-homogeneous polynomial systems. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2010, 72, 1726-1736.	1.1	25
7	Existence of an inverse integrating factor, center problem and integrability of a class of nilpotent systems. <i>Chaos, Solitons and Fractals</i> , 2012, 45, 869-878.	5.1	22
8	Reversibility and quasi-homogeneous normal forms of vector fields. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2010, 73, 510-525.	1.1	20
9	Analytic integrability for some degenerate planar vector fields. <i>Journal of Differential Equations</i> , 2014, 257, 549-565.	2.2	18
10	An Algorithm for Computing Quasi-Homogeneous Formal Normal Forms under Equivalence. <i>Acta Applicandae Mathematicae</i> , 2004, 80, 335-359.	1.0	17
11	Rational integrability of two-dimensional quasi-homogeneous polynomial differential systems. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2010, 73, 1318-1327.	1.1	15
12	Characterization of a monodromic singular point of a planar vector field. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2011, 74, 5402-5414.	1.1	15
13	The center problem for nilpotent vector fields. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 466, 183-198.	1.0	15
14	On orbital-reversibility for a class of planar dynamical systems. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015, 20, 229-239.	3.3	14
15	Analytic integrability around a nilpotent singularity. <i>Journal of Differential Equations</i> , 2019, 267, 443-467.	2.2	13
16	Nilpotent centres via inverse integrating factors. <i>European Journal of Applied Mathematics</i> , 2016, 27, 781-795.	2.9	12
17	The center problem. A view from the normal form theory. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 434, 680-697.	1.0	12
18	A degenerate Hopf saddle-node bifurcation analysis in a family of electronic circuits. <i>Nonlinear Dynamics</i> , 2007, 48, 55-76.	5.2	11

#	ARTICLE	IF	CITATIONS
19	Like-linearizations of vector fields. Bulletin Des Sciences Mathematiques, 2009, 133, 806-816.	1.0	11
20	Local bifurcation of limit cycles and integrability of a class of nilpotent systems of differential equations. Applied Mathematics and Computation, 2009, 215, 314-323.	2.2	10
21	A note on analytic integrability of planar vector fields. European Journal of Applied Mathematics, 2012, 23, 555-562.	2.9	9
22	A class of non-integrable systems admitting an inverse integrating factor. Journal of Mathematical Analysis and Applications, 2014, 420, 1439-1454.	1.0	9
23	Geometric Criterium in the Center Problem. Mediterranean Journal of Mathematics, 2016, 13, 2593-2611.	0.8	9
24	Invariant curves and analytic integrability of a planar vector field. Journal of Differential Equations, 2019, 266, 1357-1376.	2.2	9
25	Analytic integrability for some degenerate planar systems. Communications on Pure and Applied Analysis, 2013, 12, 2797-2809.	0.8	9
26	A new algorithm for determining the monodromy of a planar differential system. Applied Mathematics and Computation, 2014, 237, 419-429.	2.2	8
27	Nondegenerate and Nilpotent Centers for a Cubic System of Differential Equations. Qualitative Theory of Dynamical Systems, 2019, 18, 333-345.	1.7	8
28	Analytic integrability inside a family of degenerate centers. Nonlinear Analysis: Real World Applications, 2016, 31, 288-307.	1.7	7
29	Analytical integrability problem for perturbations of cubic Kolmogorov systems. Chaos, Solitons and Fractals, 2018, 113, 1-10.	5.1	7
30	Nilpotent Systems Admitting an Algebraic Inverse Integrating Factor over $\mathbb{C}((x,y))$ . Qualitative Theory of Dynamical Systems, 2011, 10, 303-316.	1.7	6
31	On the Formal Integrability Problem for Planar Differential Systems. Abstract and Applied Analysis, 2013, 2013, 1-10.	0.7	6
32	Nondegenerate centers and limit cycles of cubic Kolmogorov systems. Nonlinear Dynamics, 2018, 91, 487-496.	5.2	6
33	Orbital Reversibility of Planar Vector Fields. Mathematics, 2021, 9, 14.	2.2	6
34	A bifurcation analysis of planar nilpotent reversible systems. Nonlinear Dynamics, 2017, 87, 835-849.	5.2	5
35	Integrability of planar nilpotent differential systems through the existence of an inverse integrating factor. Communications in Nonlinear Science and Numerical Simulation, 2019, 71, 130-140.	3.3	5
36	Analytic integrability around a nilpotent singularity: The non-generic case. Communications on Pure and Applied Analysis, 2020, 19, 407-423.	0.8	5

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37	The reversibility problem for quasi-homogeneous dynamical systems. <i>Discrete and Continuous Dynamical Systems</i> , 2013, 33, 3225-3236.	0.9	5
38	Quasi-homogeneous linearization of degenerate vector fields. <i>Journal of Mathematical Analysis and Applications</i> , 2020, 483, 123635.	1.0	4
39	Analytical Integrability of Perturbations of Quadratic Systems. <i>Mediterranean Journal of Mathematics</i> , 2021, 18, 1.	0.8	4
40	Monodromy of a class of analytic generalized nilpotent systems through their Newton diagram. <i>Journal of Computational and Applied Mathematics</i> , 2015, 287, 78-87.	2.0	3
41	Center conditions of a particular polynomial differential system with a nilpotent singularity. <i>Journal of Mathematical Analysis and Applications</i> , 2020, 483, 123639.	1.0	3
42	Orbital normal forms for a class of three-dimensional systems with an application to Hopf-zero bifurcation analysis of Fitzhugh-Nagumo system. <i>Applied Mathematics and Computation</i> , 2020, 369, 124893.	2.2	3
43	On the integrability problem for the Hopf-zero singularity and its relation with the inverse Jacobi multiplier. <i>Applied Mathematics and Computation</i> , 2021, 405, 126241.	2.2	3
44	Analytic Integrability of Some Examples of Degenerate Planar Vector Fields. <i>Acta Applicandae Mathematicae</i> , 2016, 141, 1-15.	1.0	2
45	Characterizing Orbital-Reversibility Through Normal Forms. <i>Qualitative Theory of Dynamical Systems</i> , 2021, 20, 1.	1.7	2
46	Analytically Integrable Centers of Perturbations of Cubic Homogeneous Systems. <i>Qualitative Theory of Dynamical Systems</i> , 2021, 20, 1.	1.7	2
47	New aspects of the orbital normal form of the Hopf singularity: The Rayleigh and the van der Pol forms. <i>International Journal of Non-Linear Mechanics</i> , 2018, 105, 20-26.	2.6	1
48	Structural stability of planar quasi-homogeneous vector fields. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 468, 212-226.	1.0	1
49	Orbitally universal centers. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2020, 195, 111746.	1.1	1
50	A New Normal Form for Monodromic Nilpotent Singularities of Planar Vector Fields. <i>Mediterranean Journal of Mathematics</i> , 2021, 18, 1.	0.8	1
51	Orbital Hypernormal Forms. <i>Symmetry</i> , 2021, 13, 1500.	2.2	1
52	Non-formally integrable centers admitting an algebraic inverse integrating factor. <i>Discrete and Continuous Dynamical Systems</i> , 2018, 38, 967-988.	0.9	1
53	Center problem for generic degenerate vector fields. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2022, 214, 112597.	1.1	1
54	Local phase portraits through the Newton diagram of a vector field. <i>Acta Mathematica Sinica, English Series</i> , 2015, 31, 1015-1034.	0.6	0

#	ARTICLE	IF	CITATIONS
55	Normal Form for a Class of Three-Dimensional Systems with Free-Divergence Principal Part. Understanding Complex Systems, 2018, , 37-65.	0.6	0
56	Local Integrability for Some Degenerate Nilpotent Vector Fields. Understanding Complex Systems, 2018, , 243-267.	0.6	0
57	Algebraic integrability of nilpotent planar vector fields. Chaos, Solitons and Fractals, 2021, 145, 110765.	5.1	0
58	Algebraic Inverse Integrating Factors for a Class of Generalized Nilpotent Systems. SEMA SIMAI Springer Series, 2016, , 287-300.	0.7	0
59	Analytic partial-integrability of a symmetric Hopf-zero degeneracy. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 0, , 1-20.	1.2	0